[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

|Docket No. FAA-2012-0638; Directorate Identifier 2011-NM-266-AD; Amendment

39-17201; AD 2012-19-06]

RIN 2120-AA64

Airworthiness Directives; Empresa Brasileira de Aeronautica S.A. (EMBRAER)
Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135 airplanes, and Model EMB-145, -145ER, -145MR, -145LR, -145MP, and -145EP airplanes. This AD was prompted by a report of a lightning strike hitting an airplane tail boom causing certain rear bulkhead parts to jam an elevator control rod. This AD requires installing or reworking, as applicable, metallic diverters and aluminum sheets; modifying the light assembly on the tail boom rear movable fairing; and replacing the hood assembly with a new hood assembly and rerouting its electrical harness. We are issuing this AD to prevent lightning strikes from causing certain parts to contact the airplane pitch control system, which could reduce airplane controllability.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF

PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may examine the AD docket on the Internet at http://www.regulations.gov or in person at the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC.

FOR FURTHER INFORMATION CONTACT: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1175; fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to include an AD that would apply to the specified products. That NPRM was published in the <u>Federal Register</u> on June 18, 2012 (77 FR 36224). That NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

[A] lightning strike event hitting the airplane tail boom [caused certain rear bulkhead parts to jam an elevator control rod] * * *. The lack of the appropriate protection against lightning strike effects [could cause certain parts to contact the airplane pitch control system, which could reduce airplane controllability.]

* * * * * * *

The required actions include installing or reworking, as applicable, metallic diverters and aluminum sheets; modifying the light assembly on the tail boom rear movable fairing; and replacing the hood assembly with a new hood assembly and rerouting its electrical harness. You may obtain further information by examining the MCAI in the AD docket.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (77 FR 36224, June 18, 2012) or on the determination of the cost to the public.

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting the AD as proposed.

Costs of Compliance

Based on the service information, we estimate that this AD will affect about 668 products of U.S. registry. We also estimate that it will take about 12 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$2,507 per product. Where the service information lists required parts costs that are covered under warranty, we have assumed that there will be no charge for these parts. As we do not control warranty coverage for affected parties, some parties may incur costs higher than estimated here. Based on these figures, we estimate the cost of the AD on U.S. operators to be \$2,356,036, or \$3,527 per product.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- 1. Is not a "significant regulatory action" under Executive Order 12866;
- 2. Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);
 - 3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

We prepared a regulatory evaluation of the estimated costs to comply with this AD and placed it in the AD docket.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov; or in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains the NPRM (77 FR 36224, June 18, 2012), the regulatory evaluation, any comments received, and other information. The street address for the Docket Operations office (telephone (800) 647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new AD:

2012-19-06 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39-17201. Docket No. FAA-2012-0638; Directorate Identifier 2011-NM-266-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-145, -145ER, -145MR, -145LR, -145MP, and -145EP airplanes; and Model EMB-135BJ, -135ER, -135KE, -135KL, and -135LR airplanes; certificated in any category; all serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 55, Stabilizers.

(e) Reason

This AD was prompted by a report of a lightning strike hitting an airplane tail boom causing certain rear bulkhead parts to jam an elevator control rod. We are issuing this AD to prevent lightning strikes from causing certain parts to contact the airplane pitch control system, which could reduce airplane controllability.

(f) Compliance

You are responsible for having the actions required by this AD performed within the compliance times specified, unless the actions have already been done.

(g) Actions

Within 5,000 flight hours or 48 months after the effective date of this AD, whichever occurs first: Install or rework, as applicable, metallic diverters and aluminum sheets; modify the light assembly on the tail boom rear movable fairing; and replace the hood assembly with a new hood assembly having part number (P/N) 145-23046-403 and reroute its electrical harness. Do all the actions in accordance with the Accomplishment Instructions of EMBRAER Service Bulletin 145LEG-55-0013, dated September 8, 2011 (for Model EMB-135BJ airplanes); or EMBRAER Service Bulletin 145-55-0030, Revision 05, dated July 29, 2011 (for Model EMB-145 and EMB-135, except -135BJ, airplanes).

(h) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a

principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to assure the product is airworthy before it is returned to service.

(i) Related Information

Refer to MCAI Brazilian Airworthiness Directive 2011-11-01, dated November 30, 2011, and the following service information, for related information.

- (1) EMBRAER Service Bulletin 145LEG-55-0013, dated September 8, 2011.
- (2) EMBRAER Service Bulletin 145-55-0030, Revision 05, dated July 29, 2011.

(j) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.
 - (i) EMBRAER Service Bulletin 145LEG-55-0013, dated September 8, 2011.
 - (ii) EMBRAER Service Bulletin 145-55-0030, Revision 05, dated July 29, 2011.
- (3) For service information identified in this AD, contact Empresa Brasileira de Aeronautica S.A. (EMBRAER), Technical Publications Section (PC 060), Av. Brigadeiro

Faria Lima, 2170 - Putim - 12227-901 São Jose dos Campos - SP – BRASIL; telephone +55 12 3927-5852 or +55 12 3309-0732; fax +55 12 3927-7546; email distrib@embraer.com.br; Internet http://www.flyembraer.com.

- (4) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.
- (5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

 $\underline{http://www.archives.gov/federal-register/cfr/ibr-locations.html}.$

Issued in Renton, Washington, on September 6, 2012.

Ali Bahrami, Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. 2012-23277 Filed 09/21/2012 at 8:45 am; Publication Date: 09/24/2012]